

<b>REQUEST FOR QUOTATION (THIS IS NOT AN ORDER)</b>			THIS RFO <input checked="" type="checkbox"/> IS <input type="checkbox"/> IS NOT A SMALL BUSINESS SET-ASIDE		PAGE OF PAGES 1 11
1. REQUEST NO. N00173-14-Q-0046	2. DATE ISSUED	3. REQUISITION/PURCHASE REQUEST NO. 61-0510-14	4. CERT. FOR NAT. DEF. UNDER BDSA REG. 2 AND/OR DMS REG. 1		RATING
5a. ISSUED BY Supply Officer (Code 3410) NRL Washington DC 20375			6. DELIVER BY (Date) 01/16/2014		
5b. FOR INFORMATION CALL (NO COLLECT CALLS)			7. DELIVERY		
NAME Donna Speight		TELEPHONE NUMBER		<input checked="" type="checkbox"/> FOB DESTINATION <input type="checkbox"/> OTHER (See Schedule)	
AREA CODE 202		NUMBER 767-0105		9. DESTINATION	
8. TO:			a. NAME OF CONSIGNEE Naval Research Laboratory		
a. NAME ALL QUOTERS			b. STREET ADDRESS 4555 Overlook Ave SW		
b. COMPANY			c. CITY Washington		
c. STREET ADDRESS			d. STATE DC		
d. CITY		e. STATE	f. ZIP CODE 20375		e. ZIP CODE
10. PLEASE FURNISH QUOTATIONS TO THE ISSUING OFFICE IN BLOCK 5a ON OR BEFORE CLOSE OF BUSINESS (Date) 12/17/2013			IMPORTANT: This is a request for information, and quotations furnished are not officers. If you are unable to quote, please so indicate on this form and return it to the address in Block 5a. This request does not commit the Government to pay any costs incurred in the preparation of the submission of this quotation or to contract for supplies or service. Supplies are of domestic origin unless otherwise indicated by quoter. Any representations and/or certifications attached to this Request for Quotation must be completed by the quoter.		

**11. SCHEDULE (Include applicable Federal, State and local taxes)**

ITEM NO. (a)	SUPPLIES/ SERVICES (b)	QUANTITY (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)
See Attached Continuation Sheets					

12. DISCOUNT FOR PROMPT PAYMENT	a. 10 CALENDAR DAYS (%)	b. 20 CALENDAR DAYS (%)	c. 30 CALENDAR DAYS (%)	d. CALENDAR DAYS	
				NUMBER	PERCENTAGE

NOTE: Additional provisions and representations ☐ are ☐ are not attached.

13. NAME AND ADDRESS OF QUOTER			14. SIGNATURE OF PERSON AUTHORIZED TO SIGN QUOTATION		15. DATE OF QUOTATION
a. NAME OF QUOTER			16. SIGNER		b. TELEPHONE
b. STREET ADDRESS					
c. COUNTY					
d. CITY	e. STATE	f. ZIP CODE	c. TITLE (Type or print)		NUMBER

CONTINUATION SHEET

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NAME OF OFFEROR CONTRACTOR

ALL QUOTERS

ITEM NO.	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
001	<p>STA 449 Jupiter Simultaneous Thermal analyzer (TG-DSC/DTA Apparatus) Temperature range: according to selected furnace -150 2400 degrees C, for Cp determination up to 1500 degree C (with suitable furnaces and sample carriers) consisting of: basis system including a top-loading micro balance (digital resolution lug, maximum sample load/measurement range 35g including sample crucible), electric motor driven furnace hoist (basic system) and built-in furnace control and power supply. The system has three magnetic valves and gas frits for purge gas inlet to the sample as standard equipment. It is suitable for measurements under normal atmosphere, in dynamic and static inert gas atmosphere. The instrument is vacuum tight (10E-4 mbar). Proteus measurement and analysis software for STA 449 F3 for data acquisition, storage and evaluation under MS windows. Includes Marcorecorder Features: Multitasking with simultaneous operation of several thermoanalytical systems and simultaneous Graphical interface, integrated detailed help system detailed information: see technical data sheet STA windows software (Hardware requirements: STA 449 F3 required PC with MS windows and printer per technical datasheet) OPN: STA400F3A01</p> <p>P/N: STA400F3A01.000-00</p>	1	EA		
002	<p>Accessory Kit for furnace hoist for two furnaces, with manual pivoting mechanism</p> <p>OPN: HTP40000A05.020 P/N: HTP40000A05.020</p>	1	EA		
003	<p>Highest temperature vacuum tube furnace with heating element from tungsten for measurements under helium atmosphere and vacuum, radiation shield pack from tungsten, furnace jacket water-cooled, connection for high vacuum pumping system, working temperature range in high vacuum 400 .... 2400 degrees C, in helium atmosphere 25 .... 2400 degree C, max temperature 2400 degree C. max power consumption 15 kW, included manometer accessory, display range -1 0 .6 bar</p> <p>P/N: HTP4000A89.000-00</p>	1	EA		

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ITEM NO.	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
004	Sample carrier system for TG measurements, complete with radiation shield, thermocouple W3%Re-W25%Re (exchangeable), sample crucibles NGB809001 from tungsten, temperature range 25 ... 2400 degree C (protective gas)  P/N: HTP40000A52.000-00	1	EA		
005	Furnace power supply system for 2400 degree C tungsten furnace, consisting of: 19" cabinet power control 15.0 kVA, with current Isolating transformer 12.0 kVA safety device for monitoring protective gas flow and cooling water flow for highest temperature furnaces (2000 degree C/2400 degree C/2800 degree C) power supply 230 VAC +/-10 %, 50/60 Hz, single phase  P/N: HTP40000A30.010-00	1	EA		
006	Refrigerated bath circulator, cooling capacity 260 W (at 20 degree C), heating capacity 2000 W, multifunction display, connection parts, power supply 115 V/ 60 Hz  P/N: 6.226.1-90.6.00	1	EA		
007	Computer system, English version, consisting of desktop PC, Processor core i5, 3.10 GHz, RAM 4 GB, hard disk 500 GB DVD + RW drive, widescreen LCK monitor 22" Ultra VGA, Windows 7 professional / 32 bit Interfaces: serial, USB, Ethernet  P/N: 1.400.69-50.0.00A	1	EA		
008	Software extension for TG/STA/DIL instruments for adding C-DTA evaluation features: Calculation and graphic presentation of the c-DTA curve together with additional measuring curves (optional) ability to evaluate onset-, peak-, inflection point, end temperature automatic peak search tabulated printout for ASCII file export of the c-DTA determination of single values of the c-DTA curve (Required: Proteus basic software, required PC with MS windows per technical datasheet)  P/N: SW-CDTA-69X.1B	1	EA		



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ITEM NO.	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
009	Calibration sample kit with 8 substances 400 mg each for DSC/DTA calibration of enthalpy and temperature. Temperature range ambient..... 1500 degree C, in wooden case with foam lining and certificate of compliance, for use in Al2O3 crucibles  P/N 6.223.5-91.00	1	EA		
0010	High vacuum pumping systems for instruments with 2400 degree C-furnace turbo molecular pump (30 l/s), with mounted driving electronics, two-stage vane-type rotary pump (4 m 3/h) for rough vacuum, with vacuum measuring tube and vacuum measuring instruments with digital display (115/230 V, 50/60 Hz)  P/N HTP40000A89.043-00	1	EA		
011	MFC gas control block for installation inside the instrument replacing the magnetic valves and gas frits, with 3 inputs and 3 outputs, for non-corrosive and non-explosive gases/gas mixtures, calibrated for Ne, default conversion factors for O2, He, Ar, CO2 and synthetic air, other gases/gas mixtures on request, flow rate 5 ml/min up to 250 ml/min with a resolution of 1 ml/min control and registration of the gas flows  P/N: HTP40000A10.000-00	1	EA		
012	Sample crucible from tungsten for TG measurements P/N: NGB809001	6	EA		
013	Crucible from graphite, 0.3 ml P/N: GB445333	10	EA		
014	Crucible from tungsten, 0.08 ml (2400 degree C) for TG-DTA measurements P/N: NGB808999	16	EA		
015	Crucible from graphite, 0.15 ml P/N: GB427607	17	EA		
016	Crucible from Al2O3, 0.15 ml P/N: GB399148	2	EA		

STANDARD FORM 36 JULY 1966 GENERAL SERVICES ADMINISTRATION FED. PROC. REG. (41 CFR) 1-16.101		CONTINUATION SHEET		REF. NO. OF DOC. BEING CONT'D  N00173-14-Q-0046		PAGE OF  2 c 11	
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ITEM NO.	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT		
017	Crucible from zirconia, 0.15 ml P/N: GB399148	8	EA				
018	Crucible liner from boron nitride suited for tungsten crucible GB453520 and NGB808999  P/N: NGB805943	6	EA				
019	Sample carrier system for TG-DTA measurements, thermocouple W3%Re-W25%Re, without radiation shield, without crucibles  P/N: HTP4000A53.010-00	2	EA				
020	Operating instructions STA 449 F3 English  P/N: BA0STA449F3-EN	1	EA				
021	Voltage/Frequency: 115(+/-10%) / 60Hz Note: The standard electrical design of the instrument is for a line voltage of 115 V, single phase, 60 hz. Please note differing power requirements of some special items (e.g. power supply and sample preparation machines)	1	EA				
022	Set of Spare Parts and Software consisting of: Calibration substance NGB813700 (Ni-C) Eutectics from metal-carbon serve in general for temperature calibration STA 449, equipped tungsten furnace, WRe TG-DTA sample carrier and graphite crucible GB427607. The melting point of NI-C is a 1329 degree C. Scope of delivery: 3 pieces with certificate of compliance and calibration instructions.  P/N: HTP40000A93.021-02	1	EA				
023	Calibration substance NGB813701 (Pd-C) Eutectics from metal carbon serve in general for temperature calibration STA 449, equipped tungsten furnace, WRe TG-DTA sample carrier and graphite crucible GB427607. The melting point of Pd-C is at 1492 degree C. Scope of compliance and calibration instructions.  P/N: HTP40000A93.021-03	1	EA				

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ITEM NO.	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
024	Calibration substance NGB813702 (Pt-C) Eutectics from metal carbon serve in general for temperature calibration STA 449, equipped tungsten furnace, WRe TG-DTA sample carrier and graphite crucible GB427607. The melting point of Pt-C is at 1738 degree C. Scope of delivery: 3 pieces with certificate of compliance and calibration instructions.  P/N: HTP40000A93.021-04	1	EA		
025	Calibration substance NGB813703 (Ru-C) Eutectics from metal-carbon serve in general for temperature calibration STA 440, equipped tungsten furnace, WRe TG-DTA sample carrier and graphite crucible GB427607. The melting point of Pu-C is a 1953 degree C. Scope of delivery: 3 pieces with certificate of compliance and calibration instructions.  P/N: HTP40000A93.021-05	1	EA		
026	Service Installation and Training - up to 3 working days.  BRAND NAME OR EQUAL  If available please include a published price list or a cost breakdown and return the RFQ package to the following fax number (202) 767-6678.  Any questions concerning this Request for Quotation (RFQ) must be emailed to SolQnA@nrl.navy.mil at least five (5) days before the closing date shown in block 10 on page 1 of the RFQ.	1	EA		